

AGENDA STAFF WORKSHOP #3

Guidelines for Reducing Bird and Bat Impacts from Wind Development in California Docket # 06-OII-1

WEDNESDAY, SEPTEMBER 27, 2006 (10:00 a.m. to 5:00 p.m.)

THURSDAY, SEPTEMBER 28, 2006 (9:00 a.m. to 4:00 p.m.)

Aera Energy Training Room
Rayburn S. Dezember Leadership Development Center
CSUB Business Development Center
California State University, Bakersfield
Bakersfield, California

Workshop Objectives:

- Discuss impacts and mitigation in the context of CEQA and state wildlife laws;
- Discuss assessment of impacts to birds and bats at proposed wind energy development;
- Discuss a process for guideline revisions and updates;
- Discuss mitigation to avoid, reduce, or compensate for impacts; and
- Identify action items in advance of next workshop.

WEDNESDAY, SEPTEMBER 27

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| 10:00 – 10:20 | Introductions, Workshop Objectives, Agenda Review, and Recap of Past Workshops – <i>Paul De Morgan, RESOLVE and Misa Ward, CEC</i> |
| 10:20 – 10:40 | A CEQA Context for Impact Analysis and Mitigation – <i>Anne Mudge, Morrison & Foerster</i> <ul style="list-style-type: none">○ CEQA significance determination for biological resources○ Examples of projects with less-than-significant impacts○ Decision tree for significance determination; tiering, streamlining○ Mitigation and monitoring requirements under CEQA |
| 10:40 – 11:00 | CDFG Perspective on Impacts and Mitigation – CEQA and Other Laws – <i>Scott Flint, CDFG</i> <ul style="list-style-type: none">○ Pre-permitting assessment in relation to impact analysis/mitigation○ Other state laws relating to wildlife protection○ CDFG perspective on compensatory mitigation○ Role of CDFG in developing mitigation, monitoring mitigation effectiveness |

11:00 – 12:00	Discussion Questions <ol style="list-style-type: none"> 1. When should a lead agency require compensatory mitigation? When should a lead agency require post-construction monitoring? 2. What is the appropriate role for CDFG and USFWS to assist lead agencies in determining if data from other studies are applicable and adequate for developing impact assessments and mitigation measures? 3. What criteria should be established for using pre-existing information for impact determinations, including deciding if a categorical exemption is appropriate?
12:00 – 1:00	Lunch
1:00 – 1:20	Kinds of Impacts – <i>Scott Flint, CDFG</i> <ul style="list-style-type: none"> ○ Direct: bird and bat collisions with turbines, guy wires ○ Indirect: displacement, disturbance, disruption of breeding or foraging, habitat loss ○ Cumulative
1:20 – 2:20	Discussion Questions <ol style="list-style-type: none"> 4. How much discussion should the guidelines include about impacts due to habitat loss? 5. How do the displacement and disturbance impacts due to wind energy development in California compare to other states and countries? 6. What are the necessary steps to develop a cumulative impact analysis and what should the scope of that analysis be?
2:20 – 2:30	Break
2:30 – 2:50	Impact Assessments – <i>Dick Anderson, CEC</i> <ul style="list-style-type: none"> ○ Definitions of risk – (individual v. population) ○ Assess exposure to collision for resident, wintering, migratory species ○ Metrics for quantitative risk estimate ○ Collision Risk Models and Ecological Risk Assessment
2:50 – 3:50	Discussion Questions <ol style="list-style-type: none"> 7. How much detail should the guidelines provide on risk assessment protocol (e.g., should the guidelines specify how to develop a collision risk estimate)? 8. What kind of data from other studies could be included in the guidelines to assist in evaluating potential impacts (e.g., a table showing flight-height data or fatality estimates for collision susceptible species from other studies)? 9. How much analysis should pre-permitting studies include on potential risk to populations due to wind energy development? 10. How should Ecological Risk Assessment be used to evaluate potential impacts to bird and bat populations?

- 3:50 – 4:00 **Guideline Revisions** – *Misa Ward, CEC and Scott Flint, CDFG*
- Possible approaches for periodic review and revision of guidelines
- 4:00 – 4:30 **Discussion Questions**
11. What type of ongoing forum would be useful to receive comments/suggestions to improve survey protocols and mitigation recommendations?
 12. How should knowledge advances from PIER research be incorporated into revised guidelines?
- 4:30 – 5:00 **Open Discussion**
- Discuss items omitted from discussion questions, or revisit questions not fully addressed during today's workshop.
- 5:00 **Adjourn**

THURSDAY, SEPTEMBER 28, 2006

- 9:00 – 9:10 **Introductions and Agenda Review** – *Paul De Morgan, RESOLVE*
- 9:10 – 9:30 **Turbine Design & Avoidance/Minimization Opportunities** – *Bob Thresher, National Research Energy Laboratory*
- Evolution of turbine design
 - Known turbine risk factors
 - Opportunities for impact reduction with turbine design/siting
- 9:30 – 10:30 **Discussion Questions**
1. What evidence do we have that the new, larger turbines reduce collision impacts to raptors compared to old turbines? To resident/migratory songbirds? To resident/migratory bats?
 2. What elements of turbine design/siting can be changed during the pre-permitting phase of development to reduce predicted impacts to birds and bats?
 3. Are there examples (other than Foote Creek, WY) where information about site characteristics influenced turbine siting?
 4. What kinds of Best Management Practices, general guidance on turbine siting/design, and other generic avoidance measures have been useful on past projects and should be included in the guidelines?
- 10:30 – 10:40 **Break**
- 10:40 – 11:00 **Mitigation** – *Dick Anderson, CEC*
- Avoidance and minimization
 - Reduce or eliminate impact over time and operations mitigation
 - Compensate for impact
 - Adaptive mitigation (management) and mitigation effectiveness monitoring

- Decommissioning

11:00 – 12:00

Discussion Questions

5. How can lead agencies establish an effective mechanism for implementing post-construction mitigation? (e.g., if a Technical Advisory Committee (TAC) is part of an adaptive management program, how are recommendations from the TAC translated into management action?)
6. Are there examples of successful implementation of seasonal shutdowns or other operational mitigation in reducing collision fatalities?
7. How can mitigation options be structured to provide: (a) some certainty for mitigation implementation, and (b) some certainty for financial risk for wind developers?
8. How much detail should the guidelines include on mitigation options? For example, should the guidelines provide suggested language for avoidance and compensatory mitigation that could be used by a lead agency in their permit conditions?

12:00 – 1:00

Lunch

1:00 – 1:15

Compensatory Mitigation – *Scott Flint, CDFG*

- Circumstances requiring compensatory mitigation
- Compensation approaches
- Examples from other projects

1:15 – 2:20

Discussion Questions

9. How can guidelines provide guidance on determining the nexus between impacts and compensatory mitigation, and the amount of mitigation?
10. Should compensatory mitigation programs for wind energy be established on a county/regional/statewide level? How would such programs be administered?
11. When is it acceptable for compensatory mitigation to include an option for contributing to a research fund?
12. What compensatory mitigation models (e.g., wetland or endangered species mitigation banks) would be appropriate for wind energy mitigation?

2:20 – 2:30

Break

2:30 – 3:40

Open Discussion

- Discuss items omitted from discussion questions, or revisit questions not fully addressed during the two-day workshop

3:40 – 4:00

Next Steps – *Paul De Morgan, RESOLVE and Linda Spiegel, PIER*

- Deadline for comments on this workshop
- Future workshop planning: venue, location, topics, format
- Update on PIER research scoping workshop

4:00

Adjourn